# 01-04-02



#### In the United States Patent and Trademark Office

Appn. Filed: 09/26/2001

JAN 0 9 2002 Technology Center 2100

Applicants:

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Mason K. Yu, JR., Walnut Creek, CA

Gregory J. Yu, Hillsborough, CA

Appn. Title:

System and method for categorizing, aggregating and analyzing payment

transactions data

Mailed: December 24, 2001

At:

Burlingame, CA

#### **Information Disclosure Statement**

**Assistant Commissioner for Patents** Washington, District of Columbia 20231

Dear Sir or Madam:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon. Following are comments on references pursuant to Rule 98:

**Patent Documents** 

U.S. Patent No. 5,433,483 issued on July 18, 1995 to Yu describes a bank check system for a household or business to mark a check for a chosen category of expenditure. This check does not suggest any means or purpose in aggregating the categorized expenditure amounts into universal categories among multiple payment transaction channels by grouped households and businesses.

- U.S. Patent No. 5,559,313 issued on September 24, 1996 to Claus et al. describes a method for using a smart card to receive purchase transaction data from a merchant at point of sale and transfer the categorized purchase data into a spreadsheet maintained by a PC. This does not claim the combination of purchase data among a plurality of smart card holders.
- U.S. Patent No. 5,630,073 issued on May 13, 1997, to Nolan describes a system for categorizing a transaction on the face of the check or deposit slip containing manually entered data to be optically scanned. This method does not contemplate the aggregation of such data among multiple parties that utilize this system.
- U.S. Patent No. 5,470,271 issued on April 14, 1998 to Kunkler, et al. describes a system and method for expenditure tracking using marks on a bank check. The data and reports output of the system, however, are not combined among multiple depositors.
- U.S. Patent No. 5,478,908 issued on May 5, 1998 to Yu describes a method for categorizing credit and debit card transactions of a cardholder; but nothing covers a means to reclassify such spending data emerging from multiple payment transaction channels.
- U.S. Patent No. 5,832,470 issued on November 3, 1998 to Morita et al. describes a classification method for documents using key words but performs no additional analytical or mathematical analysis of the content of the documents except for grouping documents together under the same location in the database.
- U.S. Patent No. 5,917,931 issued on June 29, 1999 to Kunkler describes a printed bank check containing icons for marking directly thereon by the check writer the purpose of the payment. The invention does not involve any combination of check data among multiple check writers.
- U.S. Patent No. 5,920,848 issued on July 6, 1999 to Schutzer, et al. describes a system and a method for using intelligent agents to search for, extract and synthesize financial transactions data for online banking customers. The agent functions, however, to serve a single user and not multiple users to aggregate their transactional data.
- U.S. Patent No. 5,930,764 issued on July 27, 1999 to Melchione et al. describes a system for standardizing and householding customer data to enhance marketing efforts directed at

3

customers. However, there is no means to extract spending information as part of a personal financial profile nor a means to aggregate such information among a customer database.

- U.S. Patent No. 6,009,415 issued on December 28, 1999 to Schurling et al. describes a method for scoring the relationships of customers of a bank involving products and services used by such customers. The relationship data among multiple customers is not aggregated or analyzed for the Bank in this invention.
- U.S. Patent No. 6,014,454 issued on January 11, 2000 to Kunkler describes printed bank checks and negotiable instruments with icons, symbols, or text images to be marked upon for indicating an expenditure category. The invention includes no means for accumulating transactional data among multiple bank customers.
- U.S. Patent No. 6,039,244 issued on March 11, 2000 to Finsterwald describes a method for motivating and rewarding customers that make purchasers of goods and services tracked via a code or other data affixed or assigned thereto. This method does not accumulate and aggregate spending data among multiple customers.
- U.S. Patent No. 6,119,9333 issued on September 19, 2000 to Wong and Miles describes a method for measuring and rewarding customer purchasing behavior. Analysis and response is focused on individual customer actions and transactions and not on customers as a block or group.
- U.S. Patent No. 6, 295,576 issued on February 6, 2001 to McIntosh describes a uniform document classification system for use within an organization. The invention is dedicated to optimizing record retention practices and does not cover transactional data collected by a single organization or such data aggregated among multiple entities.

#### Non-Patent Literature

Robert Dennis, Assistant Director of the Congressional Budget Office, describes consumption data gathered surveys and their apparent lack of timeliness. The time lags comprise the quality and utility of the spending data.

Johnson, Rogers & Tan in *Monthly Labor Review* describe how family budgets are estimated by the U.S. Bureau of Labor Statistics. There is a complete lack of scientific methods

for almost all items of a family budget, according to the BLS approach. Geographic differentials are crudely estimated and rather unreliable.

Kokolski in *Monthly Labor Review* describes how the national Consumer Price Index uses the Consumer Expenditure Survey. No use of actual transactional data is present in this method.

Moran & McCully in *Survey of Current Business* analyzes a 40-year trend in personal consumption in the U.S. The analysis relies upon personal consumption expenditures data, which does not contemplate accumulating actual consumer transactional data.

Richardson working on behalf of the National Bureau of Economic Research examined the scanner indexes for a superior measure of the Consumer Price Index. It improves data collection for the CPI which typically is a product of a phone survey of consumers. Scanner data uses the Universal Product Code and generates actual pricing and quantity data of a transaction. However, it does not link the identity or household profile to the actual transaction. Therefore it cannot measure the overall quantity purchased for a given household over a period of time.

Rogers' *Handbook of Key Economic Indicators* describes the methodology for estimating personal income, savings rates and personal consumption. Deficiencies here include surveys and crude residual calculations.

The Statistics Bureau & Statistics Center of the Japanese Ministry of Public Management, etc. conducts annual income and expenditure surveys. They are only surveys that require self-entry and do not link to actual transactional data.

In a study entitled "Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances" conducted on behalf of the Board of Governors of the Federal Reserve, spending by businesses was estimated. The results were garnered by random surveys rather than capturing transactional data of small business payments.

Thus, none of the above references discloses, as claimed in our independent Claim 1 with subordinate Claim 2, independent Claim 3 with subordinate claims 4 through 10, independent Claim 11, with subordinate Claims 12 through 18, and in independent Claim 19 with subordinate

Claims 20 through 26, our invention, a system and method for categorizing, aggregating and analyzing expenditure data.

Very respectfully submitted,

Gregory J. Yu on behalf of all

Applicants: Mason K. Yu, SR.; Mason K. Yu, JR.; Gregory J. Yu

Encl.: PTO -1449 & References

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### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**Application Number** 09/965,100 09/26/2001 Filing Date **First Named Inventor** Mason K.

**Group Art Unit Examiner Name** 

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<b>X</b>	U.S. PATENT DOCUMENTS							
Examiner Cite No.1 V.S. Patent Document Number Kind Code? (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
		5,433,48	3	Yu	07/26/1995	7:34-52: 8:42-49		
		5,559,31	3	Claus et al.	09/24/1996	1:37-48		
		5,630,07	3	Nolan'	05/13/1997	10:22-39		
		5,740,27		Kunkler et al.	D4/14/1998	34.22-33		
		5,748,90	8	Yu	05/05/1998	15:13-51		
		5,832,47	0	Morita et al.	11/03/1998	3:11-37		
		5.917.93	1	Kunkler	06/29/1999	5:8-51		
		5,920,84	8	Schutzer et al.	h7/06/1999	4:1-67: 5:1-17		
		5,930,76		Melchione et al.	<u> </u>	10:66-67: 12:7-38		
		6,009,41	5	Schurling et al.	12/28/1999	18-22		
		6.014.45	4	Kunkler	b1/11/2000 l	5:8-51		
		6.039.24	4	Finserwald	03/21/2000	1:33 to-3:62_		
		6,119,93	3   _	Wong et al.	09/19/2000	1:56 to 2:2		
		6.185,57	6	McIntosh	<u> </u>	2:6 to 3:39		

	FOREIGN PATENT DOCUMENTS							
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Complete if Known **Application Number** 09/965,100 **Filing Date** 09/26/2001 **First Named Inventor** MASON K. YU Group Art Unit

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**Examiner Name** Attorney Docket Number

Technology Center 2100 OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Examiner Cite item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Initials publisher, city and/or country where published. DENNIS, ROBERT, "Issues Affecting the Bureau of Economic 0 Analysis," in prepared testimony of the Congressional Budget Office Assistant Director, Macroeconomic Analysis Division, before the House Committee on Government Reform, Subcommittee of the Census, April 5, 2001, transmitted by Fed. News Service JOHNSON, DAVID S.; ROGERS, JOHN M.; and TAN, LUCILLE, "A P Century of Family Budgets in the United States," Monthly Labor Review, Vol. 124, No. 5, MAy 2001, pp. 28-45, U.S. Department of Labor, Washington, D.C. KOKOSKI, MARY F., "Alternative CPI Aggregations: Two Q Approaches," Monthly Labor Review, Vol. 123, No. 11, Nov. 2000 pp. 31-39, U.S. Department of Labor, Washington, D.C. MORAN, LARRY M., and McCULLY, CLINTON P., "Trends in Consumer Spending, 1959-2000," Survey of Current Business, Vol. 81, R March 2001, pp. 15-21, U.S. Dept of Commerce, Washington, D.C. RICHARDSON, DAVID H., "Scanner Indexes for the CPI," December S 25, 2000, Working Paper posted on the National Bureau of Economic Research website, www.nber.org, Cambridge, MA ROGERS, R. MARK, Handbook of Key Economic Indicators, 1994, Τ pp. 41-59, Irwin Professional Publications, Burr Ridge, IL. Ministry of Public Management, Home Affairs, Posts and Telecommunications, Government of Japan, Statistics Bureau Π... Center, "Family Income and Expenditure Survey for One-Person Households, February 8, 2001, posted at http://www.stat.go.ip/ english, Tokyo, Japan.

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Application Number 09/965.100

Filling Date 09/26/2001

First Named Inventor Mason K. Yu. SR.

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		Board of Governors of the Federal Reserve System, "Financial					
		Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances," Federal Reserve Bulletin,					
		Vol. 87, No. 4, April 2001, pp. 183-205, The Federal Reserve Board, Washington, D.C.					
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